CUSTOMER SUPPORT
1-800-462-9832

BK Precision offers courteous, professional technical support before and after the sale of their test instruments. The following services are typical of those available from our toll-free telephone number:
• Technical advice on the use of your instrument.
• Technical advice on special applications of your instrument.
• Technical advice on selecting the best instrument for a given task.
• Information on optional accessories for your instrument.
• Information on instrument repair and recalibration services.
• Replacement parts ordering.
• Information on other BK Precision instruments.
• Requests for a new BK Precision catalog.
• The name of your nearest BK Precision distributor.

Call toll-free 1-800-462-9832 Monday through Friday, 8:00 A.M. to 5:00 P.M.
Central Standard Time
(Central Daylight Time in summer)

SYMBOLS

\[A\]
See instruction manual for further precautionary information.

\[\frac{1}{2}\]
Danger, high voltage terminal.

\[COM\]
Common input terminal.

\[V\]
Volts

\[A\]
Amperes

\[DC\]
DC Voltage

\[AC\]
AC Voltage

\[\Omega\]
Ohms

\[\oplus\]
Diode Test

\[\Delta\]
Data hold symbol.

\[\text{Peak Hold symbol.}\]

\[\text{Earth ground.}\]

\[\text{Low battery symbol.}\]

400 V
Maximum input rating of terminal with respect to COM input terminal.

500 V

750 V

MAX.
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<th><strong>SPECIFICATIONS</strong></th>
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<tr>
<td><strong>DC Current (Using Clamp):</strong></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>Resolution</td>
</tr>
<tr>
<td>200 A</td>
<td>100 mA</td>
</tr>
<tr>
<td>2000 A</td>
<td>1 A</td>
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<tr>
<td><strong>Overload Protection:</strong></td>
<td>2000 A</td>
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<tr>
<th><strong>AC Current (Using Clamp):</strong> Avg. sense, rms reading.</th>
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<tbody>
<tr>
<td>Range</td>
<td>Resolution</td>
</tr>
<tr>
<td>200 A</td>
<td>100 mA</td>
</tr>
<tr>
<td>2000 A</td>
<td>1 A</td>
</tr>
<tr>
<td><strong>Overload Protection:</strong></td>
<td>2000 A</td>
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<table>
<thead>
<tr>
<th><strong>DC Voltage (Using Test Leads):</strong></th>
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<tbody>
<tr>
<td>Range</td>
<td>Resolution</td>
</tr>
<tr>
<td>200 V</td>
<td>0.1 V</td>
</tr>
<tr>
<td><strong>Overload Protection:</strong></td>
<td>1000 V DC &amp; 800 V AC, Input Impedance: 10 MΩ</td>
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<tr>
<th><strong>GENERAL</strong></th>
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<tr>
<td><strong>Resistance (Using Test Leads):</strong></td>
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<tr>
<td>Range</td>
<td>Resolution</td>
</tr>
<tr>
<td>2 kΩ</td>
<td>1Ω</td>
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<tr>
<td><strong>Overload Protection:</strong></td>
<td>450 V DC &amp; 450 V AC, Maximum Open Circuit Voltage: 3.5 V</td>
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<td><strong>Diode Test (Using Test Leads):</strong></td>
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<td>Forward Junction Voltage: Displayed in V.</td>
<td>Resolution: 1 mV</td>
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<td><strong>Peak Hold:</strong></td>
<td></td>
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<tr>
<td>Acquire Time:</td>
<td>150 ms</td>
</tr>
<tr>
<td>Accuracy: ±3.0% rdg ± 3 digits</td>
<td></td>
</tr>
<tr>
<td><strong>Data Hold:</strong></td>
<td></td>
</tr>
<tr>
<td>Displayed Reading: Instantly frozen.</td>
<td></td>
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<tr>
<td><strong>Limited One Year Warranty</strong></td>
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</table>

MAXTEC INTERNATIONAL CORPORATION warrants to the original purchaser that its **BK Precision** product, and the component parts thereof, will be free from defects in workmanship and materials for a period of one year from the date of purchase. MAXTEC will, without charge, repair or replace, at its option, defective product or component parts upon delivery to an authorized **BK Precision** service contractor or to the factory service department, accompanied by proof of the purchase date in the form of a sales receipt. To obtain warranty coverage in the U.S.A., this product must be registered by completing and mailing the enclosed warranty registration card to MAXTEC **BK Precision**, 6470 West Cortland Street, Chicago, Illinois 60635 within (15) days from the date of purchase. Exclusions: This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. It is void if the serial number is altered, defaced or removed. MAXTEC shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
SAFETY

An electrical shock causing 10 milliamps of current to pass through the heart will stop most human heartbeats. Voltage as low as 35 volts dc or ac rms should be considered dangerous and hazardous since it can produce a lethal current under certain conditions. Higher voltages are even more dangerous. Observe the following safety precautions:

1. Never exceed the following input ratings to avoid the possibility of personal injury and/or damage to the instrument:
   - DC VOLTS 1000 V DC
   - AC VOLTS 750 V rms
   - AMPS 2000 A DC or AC rms
   - OHMS 450 V peak

2. Before using clamp meter, verify that the battery compartment of the case is closed and secure. Never use it with this compartment open.

3. Remove test leads before replacing battery.

4. Only use safety type test leads.

5. When using a probe, touch only the insulated portion. Never touch the exposed tip.

6. For your safety when making high voltage measurements while the power is on, never touch the equipment, meter, or test leads.

7. Insulation rating of the clamp is 1000 V DC, 750 V AC. Do not clamp around conductors at higher voltages.

OPERATING INSTRUCTIONS

CURRENT MEASUREMENTS

1. Set OFF/ON DC or AC slide selector to AC or DC to match type of current to be measured.

2. For DC current measurements, adjust DCA ZERO for zero reading on display. If reading does not “zero”, open and release jaw several times to demagnetize the jaw.

3. Open spring loaded clamp by pressing trigger on left side of meter.

4. Position clamp around a single wire or conductor and release trigger. Make sure clamp is entirely closed.

NOTE
Clamp must be positioned around only one conductor of a circuit as shown in following diagram. If clamp is placed around two or more current carrying conductors the reading will be false. A good example of a false reading would be an attempt to measure current by clamping around the line cord of an appliance. Currents flowing in both directions tend to cancel the measurement giving a false reading.

CURRENT MEASUREMENTS (cont.)

5. For measurements of unknown current levels, set current range to 2000 amps (decimal point is not shown). For best resolution, select lower range if reading is below 200 amps. Select the appropriate range (2000 or 2000) if approximate level of current is known.

6. Read current level directly from LCD readout.

VOLTAGE MEASUREMENTS

1. Select DC or AC voltage measurements with OFF/ON DC or AC slide selector.

2. Set Function Range selector to AC 750V/DC 200V.

3. Plug red test lead into right V jack. Black test lead must be plugged into COM jack.

4. Connect test leads across measuring points.

5. Read voltage level directly from readout. Do not exceed indicated ranges.

RESISTANCE MEASUREMENTS

1. Slide OFF/ON DC or AC selector to AC or DC.

2. Set Function Range selector to 2000Ω/Ω position.

3. Plug red test lead into left Ω jack. Black test lead must be plugged into COM jack.

4. Verify that power is off and any capacitors are discharged in circuit about to be tested.

5. Connect test leads across measuring points.

6. Read resistance value directly from readout.

DIODE TESTS

1. Slide OFF/ON DC or AC selector to AC or DC.

2. Set Function Range selector to 2000Ω/Ω position.

3. Plug red test lead into left Ω jack. Black test lead must be plugged into COM jack.

4. Verify that power is off and any capacitors are discharged in circuit about to be tested.

5. Connect black test lead to cathode of diode, red test lead to anode. Forward voltage should be less than as follows:
   - Silicon diodes, 0.7 V.
   - Germanium diodes, 0.3 V.
   - LEDs, 1.5 V.

6. Reverse leads should show open circuit, “1” or “1” in leftmost position.

USING DATA HOLD FEATURE

1. Note: This feature is used to hold, or freeze a measurement.

2. Take measurement as previously outlined.

3. While measurement is displayed, press DATA HOLD. Readout will hold reading even after clamp or test leads are removed from circuit.

4. To release or clear reading on hold, press DATA HOLD again, button pops out fully.

USING PEAK HOLD FEATURE

1. Note: This feature is used to hold the maximum level of a short term changing current or voltage. For example, a surge current when power is first applied to a circuit.

2. Press PEAK HOLD immediately before making the measurement.

3. Take measurement as previously outlined.

4. To release or clear reading captured and held, press PEAK HOLD again, button pops out fully.

GENERAL PROCEDURES

WARNING
See SAFETY instructions in this manual before attempting any measurement.

1. Although a battery was supplied with this meter, it is not installed. Install it as instructed in the MAINTENANCE section of this manual.

2. Set slide selector to OFF/ON DC or AC to DC or AC. Any character in display indicates meter is on.

3. For current measurements, use the current clamp. For all other measurements use the test leads. When using test leads, plug black lead into COM jack. Plug red lead into V jack for voltage measurements, or into Ω jack for resistance and diode tests.

4. Read measurements directly from display. For current measurements select range. In high range, such as 2000 A, decimal is not shown.

5. An overrange condition using any function is shown by a “111” or “-111” reading in the leftmost position at display with no other digits present.

6. After completing your measurements, be sure to slide OFF/ON DC or AC selector to OFF to conserve battery power.

MAINTENANCE

WARNING
Remove test leads before changing batteries. Never operate instrument with battery compartment open.

CAUTION
Remove discharged batteries immediately to prevent damage from battery leakage.

BATTERY REPLACEMENT

The presence of the low battery symbol (LO BAT) on the readout indicates that the battery is near discharge. The meter may still be used for a short time afterwards. However, replace the battery as soon as possible.

The battery compartment cover is located at the rear of the case. To open this cover, slip a coin or similar object into the slot, then push down and pry up. The meter uses a standard 9 V (NEDA 1604A) battery. After replacing battery, be sure to snap cover back into case closing the compartment.